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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,797

11/26/2003

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4139

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EXAMINER

BERHANU, ETSUB D

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

05/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/721,797	<b>Applicant(s)</b> ALARCON ET AL.	
	<b>Examiner</b> ETSUB D. BERHANU	<b>Art Unit</b> 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,6,7,12,19-32 and 34-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6,7,12,19-32 and 34-47 is/are rejected.
- 7) ☒ Claim(s) 48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07 May 2008 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1, 3, 6, 7, 12, 20-32, 34, 35, 37, 38 and 40-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcala et al.'405 (previously cited) further in view of Lakowicz et al.'534 (previously cited) further in view of Crowley'229 (previously cited).

See the rejection set forth in paragraph 2 of the Office Action mailed out 08 November 2007.

Further, Alcala et al.'405 also discloses that its optical fiber is intended to be inserted into a human subject through a catheter or a needle (col. 16, lines 17-26). While Alcala et al.'405 discloses that a needle is capable of being used to insert the optical fibers into a human subject, it does not disclose the details of the needle. Crowley'229 discloses details of a hollow needle tip that not only houses an optical sensing device, but also allows for the precise locating of the optical sensing device within a test subject (see description of Figure 6). It would have been within the skill of the art to use the needle tip of Crowley'299 as the insertion needle of Alcala et al.'405 since Alcala et al.'405 requires the use of an

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insertion needle, but fails to provide the details of one, and Crowley'299 provides an insertion needle capable of being used with the optical fiber device of Alcala et al.'405.

4. Claims 36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcala et al.'405 further in view of Lakowicz et al.'534 further in view of Crowley'229, as applied to claim 1, further in view of Darrow et al.'651 (previously cited).

See the rejection set forth in paragraph 3 of the Office Action mailed out 08 November 2007.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alcala et al.'405 further in view of Lakowicz et al.'534 further in view of Crowley'229, as applied to claim 1, further in view of Sebille et al.'395 (USPN 5,028,395).

Alcala et al.'405 further in view of Lakowicz et al.'534 further in view of Crowley'299 discloses all the elements of the current invention, as discussed in paragraph 3 above, except for the optical fiber comprising silica. Alcala et al.'405 discloses the use of optical fibers, but fails to provide details of the optical fibers. Sebille et al.'395 teaches the use of optical fibers comprising silica to be used as chemical sensors (col. 4, lines 15-18). It would have been within the skill of the art to implement the optical fibers comprising silica of Sebille et al.'395 as the optical fibers of Alcala et al.'405 further in view of Lakowicz et al.'534 further in view of Crowley'299 since Alcala et al.'405 requires the use of optical fibers, but fails to provide details of the fibers, and Sebille et al.'395 provides the details of silica optical fibers capable of being used in the fiber optic probe of Alcala et al.'405.

#### ***Response to Arguments***

6. Applicant's arguments filed 10 March 2008 have been fully considered but they are not persuasive. In response to the Applicant's argument on page 8 of the Remarks filed 10 March 2008 that the device of Crowley does not contain optical fibers in the needle, the Examiner would like to note that the Crowley reference was used to motivate a reason for placing a needle tip over the optical fiber of

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Alcala. No rejection was made by substituting the optics taught in Crowley for an optical conduit. As such, the device of Crowley does not need to contain an optical fiber, it just needs a needle tip capable of being placed over the optical fiber of Alcala. Further, as noted in paragraph 3 above, Alcala discloses that its optical fiber probe is inserted into a human patient either through the use of a catheter or a needle. Because Alcala does not disclose the details of the needle, and because Crowley discloses details of a needle tip capable of being used to insert the fiber optic probe of Alcala into a human subject, it would have been within the skill of the art to use the needle tip of Crowley as an insertion tool for the fiber optic probe of Alcala. For these reasons, the rejection of claims 1, 3, 6, 7, 12, 19-32, and 34-46 are upheld.

#### ***Allowable Subject Matter***

7. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art teaches or suggests, either alone or in combination, an optical fiber wherein a polymer matrix is covalently attached to the optical fiber's distal end through functional amine groups on the surface of the optical fiber, in combination with the other claimed elements.

8. Claim 48 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ETSUB D. BERHANU whose telephone number is (571)272-6563. The examiner can normally be reached on Monday - Friday (7:00 - 3:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric F Winakur/  
Primary Examiner, Art Unit 3768

EDB